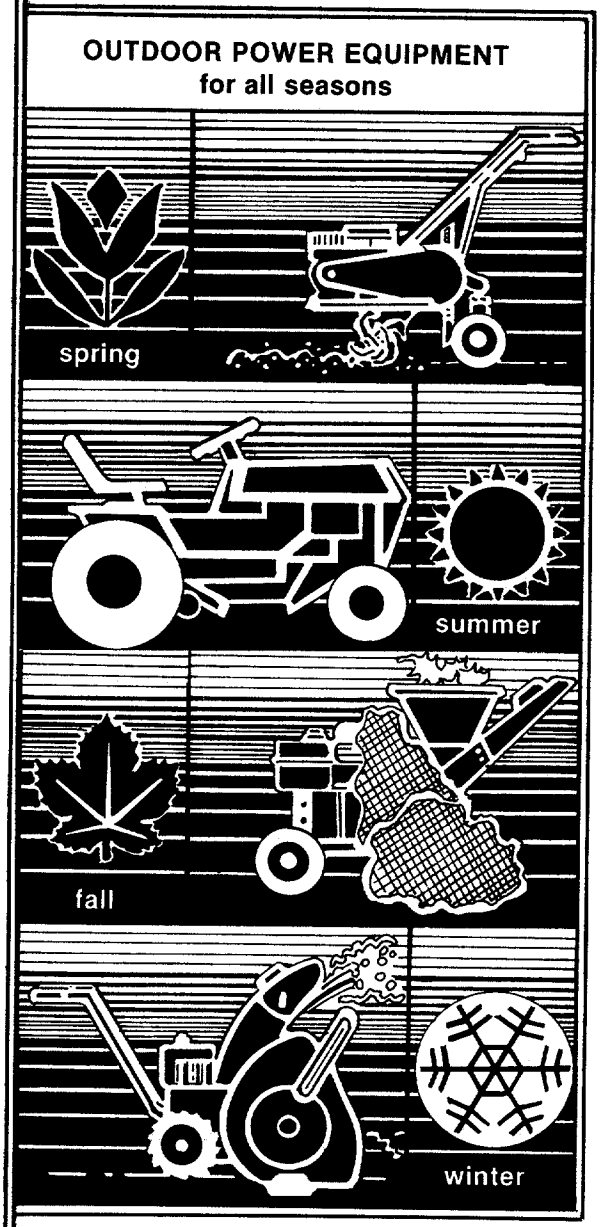
OWNER'S GUIDE



30" AND 34" LAWN TRACTORS

Model Numbers
135-395-000
135-397-000
135-398-000

Important:
Read Safety Rules and Instructions Carefully

Thank you for purchasing an American-built product.

PRINTED IN U.S.A.

FORM NO. 770-4063

INDEX

Safe Operation Practices 3
Assembly Instructions 4
Controls 8
Operation 10
Adjustments 11
Lubrication 13
Maintenance 13
Off-Season Storage 16
Trouble Shooting Chart 17, 18
Electrical System 19
Illustrated Parts for Rider 20, 22, 24
Parts List for Rider 21, 23, 25
Illustrated Parts for Transmission 26
Illustrated Parts for Differential 27
Parts Information Back Cover

Instructions given with this symbol are for personal safety. Be sure to follow them.

LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

WARNING

This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester muffler is available at your nearest engine authorized service center.



To reduce the potential for any injury, comply with the following safety instructions. Failure to comply with the instructions may result in personal injury.

SAFE OPERATION PRACTICES FOR RIDING VEHICLES

1. Read this owner's manual carefully in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
3. Know the controls and how to stop quickly—READ THIS OWNER'S MANUAL.
4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
5. No one should operate this unit while intoxicated or while taking medication that impairs the senses or reactions.
6. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
7. To prevent injury, do not carry passengers or give rides. Keep children, pets and bystanders out of the area while mowing. Only the operator should ride on the unit and only ride in the seat.
8. Check overhead clearance carefully before driving under power lines, guy wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
9. To maintain control of the unit and reduce the possibility of upset or collision, operate the tractor smoothly. Avoid erratic operation and excessive speed.
10. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidently thrown by the mower in any direction and cause injury.
11. Clear work area of objects which might be picked up and thrown by the mower in any direction and cause injury.
12. Stop the blade(s) when crossing gravel drives, walks or roads.
13. Disengage all attachment clutches and shift into neutral before attempting to start engine.
14. Disengage power to attachment(s) and stop engine before leaving operating position.
15. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
16. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
17. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
18. Disengage power to attachment(s) when transporting or not in use.
19. Take all possible precautions when leaving vehicle unattended such as disengaging power-take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
20. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face. Use extreme caution if it is necessary to drive the tractor up an incline or back the tractor down an incline because the front of the tractor could lift and rapidly flip over backward which could cause serious injury.
21. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Always keep the tractor in gear when going down steep hills to take advantage of engine braking action.
22. Stay alert for holes in terrain and other hidden hazards.
23. Use care when pulling loads or using heavy equipment.
 A. Use only approved drawbar hitch points.
 B. Limit loads to those you can safely control.
 C. Do not turn sharply. Use care when backing.
 D. Use counterweight(s) or wheel weights when suggested in owner's manual.
24. Watch out for traffic when crossing or near roadways.
25. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
26. Handle gasoline with care: It is highly flammable.
 A. Use approved gasoline container.
 B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
 C. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.

27. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in operator's manual.
28. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
29. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow engine to cool before storing in any enclosure.
30. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
31. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
32. Do not change the engine governor settings or overspeed the engine.
33. When using the vehicle with mower, proceed as follows:
 (1) Mow only in daylight or in good artificial light.
 (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
 (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
 (4) Check blade mounting bolts for proper tightness at frequent intervals.
34. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
35. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up. Disengage blades before shifting into reverse and backing up.
36. This unit should not be driven up a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually to load properly.

NOTE

This unit is shipped WITHOUT GASOLINE or OIL. After assembly, see separate engine manual for proper fuel and engine oil recommendations.

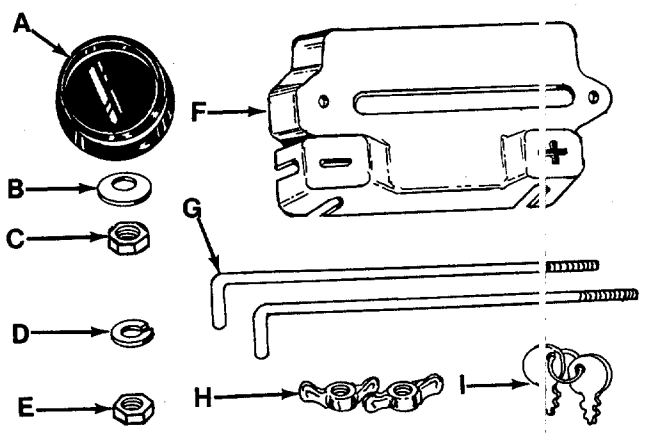


FIGURE 1.

ASSEMBLY

NOTE

Reference to right hand or left hand side of machine is from the driver's seat facing forward.

This owner's manual covers various models of lawn tractors. The units illustrated may vary slightly from your unit. Follow the instructions which pertain to your unit.

Contents of Hardware Pack:
(See Figure 1)

A (1) Steering Wheel Cap
B (1) Belleville Washer
C (1) Hex Nut 5/16-18 Thread
D (1) Lock Washer ½" I.D.
E (1) Hex Nut ½-13 Thread
F (1) Battery Cover
G (2) Battery Hold-Down Rods
H (2) Wing Nuts
I (2) Ignition Keys

Loose Parts in Carton:

(1) Battery Pack
(1) Steering Wheel
(1) Seat

BATTERY INFORMATION

WARNING

A. Battery acid must be handled with great care as contact with it can burn and blister the skin. It is also advisable to wear protective clothing (goggles, rubber gloves and apron) when working with it.*

B. Should battery acid accidentally splatter into the eyes or onto the face, rinse the affected area immediately with clean cold water. If there is any further discomfort, seek prompt medical attention.

C. If acid spills on clothing, first dilute it with clean water, then neutralize with a solution of ammonia/water or baking soda/water.

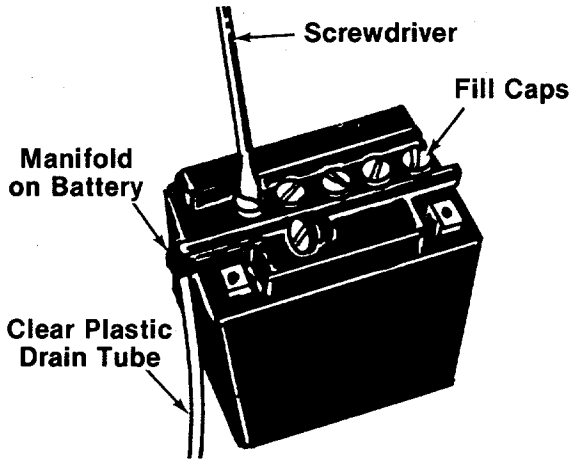


FIGURE 2.

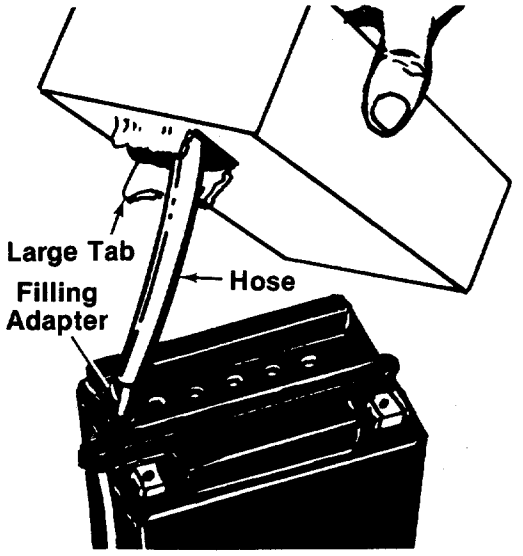


FIGURE 3.

D. Since battery acid is corrosive, do not pour it into any sink or drain. Before discarding empty electrolyte containers, rinse them with a neutralizing solution.

E. NEVER connect or disconnect charger clips to battery while charger is turned on as it can cause sparks.

F. Keep all lighted materials (cigarettes, matches, lighters) away from the battery as the hydrogen gas generated during charging can be combustible.

G. As a further precaution, only charge the battery in a well-ventilated area.

***Always shield eyes, protect skin and clothing when working near batteries.**

ACTIVATING AND INSTALLING THE BATTERY

1. Upon opening the battery pack, you should receive acid pack, battery, drain tube, filling adapter and hardware.

WARNING

BATTERIES CONTAIN SULFURIC ACID AND MAY CONTAIN EXPLOSIVE GASES (when electrolyte has been added).

2. Place the battery on table or workbench to be filled.

3. Place one end of clear plastic drain tube on manifold of battery. See figure 2.

NOTE

Some batteries may already have the drain tube installed, in which case it may be necessary to snip off the sealed end.

4. Remove the six fill caps from the top of the battery with a screwdriver. Care should be taken not to damage the fill caps. See figure 2.

5. Lay acid package down, with "push in" facing up. Using thumb, push in small perforated tab at dot on front of package. Tear down large tab to solid line, exposing hose. **Do not** use any sharp object to open acid package.

6. Pull out hose from package and hold upright. Squeeze hose forcing all acid back into package. Cut off tip of hose and insert filling adapter. See figure 3.

7. Fill each cell to upper level marked on front of battery. Replace fill caps on battery. See figure 3.

DANGER

Battery contains sulfuric acid. Refer to warning on page 5. Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beater egg or vegetable oil. Seek prompt medical attention. EYES: Flush with cool water for at least 15 minutes, then seek immediate medical attention.

Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc.) away. Be sure to charge battery only in well-ventilated areas.

KEEP BATTERIES
OUT OF THE REACH OF CHILDREN!

8. Allow battery to sit for 20 to 30 minutes. Add additional acid, if necessary, to bring it up to the proper level.
9. The battery can be charged after the 20 minutes sitting period. SLOW CHARGE THE BATTERY (DO NOT FAST CHARGE) at a maximum bench rate of 1.4 amperes until the specific gravity reading is 1.260-1.280. Charge for a minimum of 2 hours and a maximum of 8 hours.

NOTE

Charging rate after battery has been put into operation: The battery is to be charged for a period of 14-16 hours. NO LONGER THAN 30 HOURS.

NOTE

After battery has been in service, add only distilled water. DO NOT ADD ACID.

NOTE

This engine is equipped with an alternator. The current for the battery charger alternator is unregulated. During normal operation, it is only necessary to charge the battery:

1. When it is activated for the first time.
2. Before winter storage.
3. Before using the lawn tractor after winter storage.

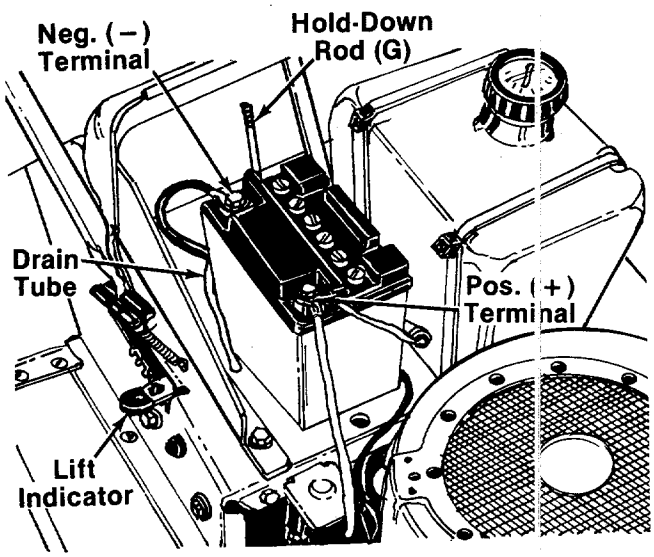


FIGURE 4.

INSTALLING THE BATTERY

1. Raise the hood by releasing the hood lock assemblies and lifting up on both sides of the hood.
2. Move the lift indicator to the position nearest the front of the lawn tractor. See figure 4. Insert one hold-down rod (G) into hole provided and lay it off to the side.

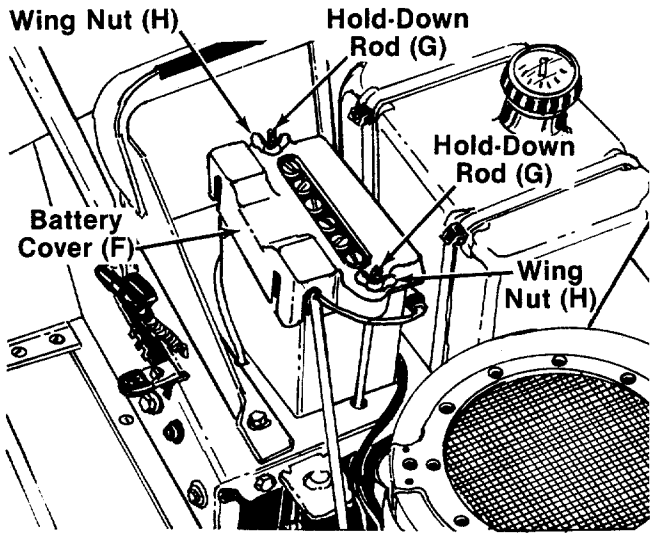


FIGURE 5.

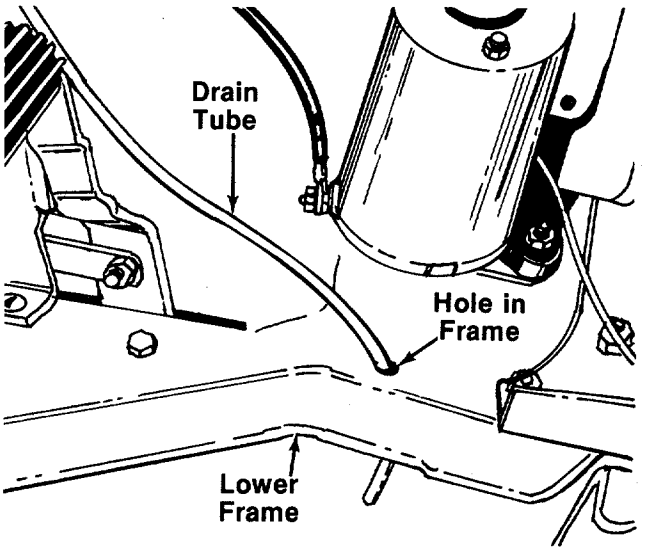


FIGURE 6.

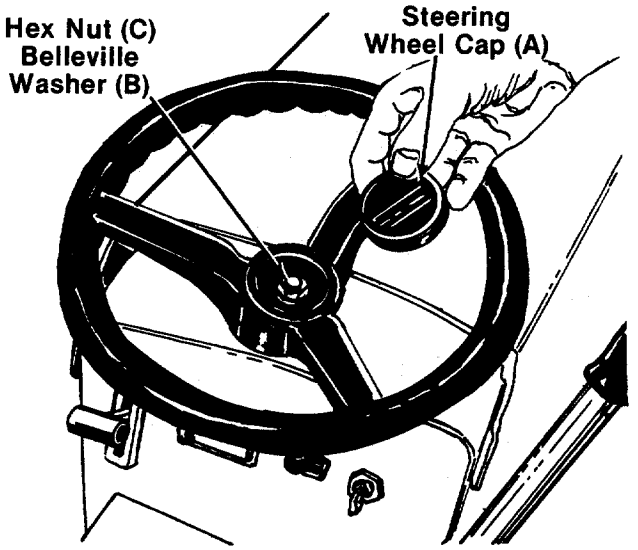


FIGURE 7.

3. Place the battery in the lawn tractor beside the gas tank so that the positive terminal is towards the front of the unit. See figure 5.

NOTE

Right and left hand sides of the unit are determined from the operating position, facing forward.

4. Slide the square nut (provided with battery hardware) into the positive (+) terminal. Place the positive (heavy red wire) cable and the small red wire on the positive terminal. Secure with screw and lock washer provided. See figure 5.
5. Slide the square nut (provided with battery hardware) into the negative (−) terminal. Place the negative (heavy black wire) cable on the negative terminal. Secure with screw and lock washer provided.
6. Place the battery cover (F) in position over the battery and hold-down rod. Secure with wing nut (H). Attach other hold-down rod to the other side of battery cover in the same manner. See figure 5.
7. Feed the battery drain tube through the hole provided beside the battery. See figure 4.
8. Route the battery drain tube forward to the hole provided in the lower frame beside the engine. See figure 6.

STEERING WHEEL INSTALLATION

1. Place steering wheel on the steering shaft, lining up the flats in the wheel with the flats on the shaft.
2. Secure with belleville washer (B) (cupped side against the steering wheel) and hex nut (C). See figure 7.
3. Press the steering wheel cap (A) on the steering wheel by hand.

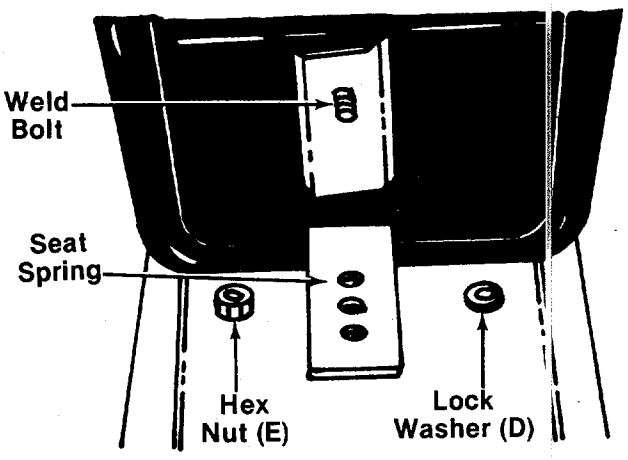


FIGURE 8.

SEAT INSTALLATION

The seat may be adjusted to three different positions. Select desired position and secure to seat spring with one lock washer (D) and hex nut (E). See figure 8.

CONTROLS

THROTTLE CONTROL

The throttle control is used to regulate the engine speed and to activate the choke on the engine. To get maximum efficiency from cutting, the throttle should be in the FAST position when operating the mower. Pushing the throttle all the way forward past FAST, will choke the engine. See figure 9.

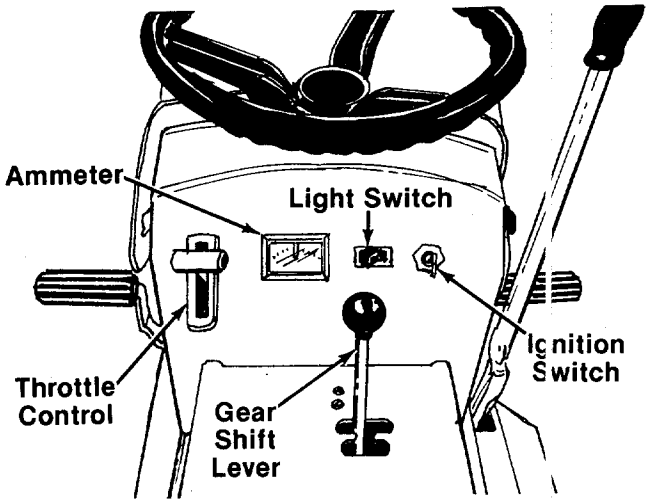


FIGURE 9.

GEAR SHIFT LEVER

The gear shift lever is used to shift into one of the forward gears, "NEUTRAL" or "REVERSE." See figure 9.

IGNITION SWITCH

Turn the key to the "START" position to start the engine. When the engine is running, let the key return to the "ON" position. To stop the engine, turn the key to the left to the "OFF" position and remove it to prevent accidental starting. See figure 9.

LIGHT SWITCH (Optional)

Push the light switch to turn on the lights. The lights will only operate when the engine is running. See figure 9.

AMMETER (Optional)

The ammeter registers the rate of battery charge or discharge. The ammeter will register on the discharging side when starting the engine. It should register on the opposite side (charging) when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling, the ammeter will not show a charge. See figure 9.

CLUTCH

The clutch pedal is located on the left hand side of the tractor and is operated with your left foot. Depress the pedal to disengage the drive mechanism. Release the clutch slowly to engage. The clutch and brake pedals must both be depressed when stopping the tractor. When shifting gears, the clutch pedal must be disengaged, and the tractor cannot be moving. See figure 10.

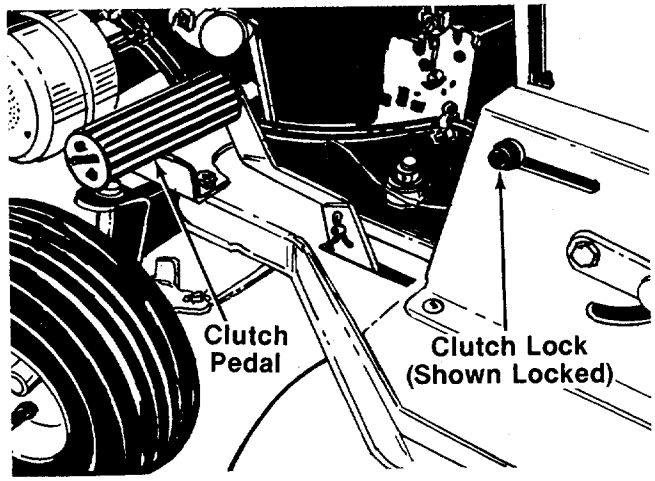


FIGURE 10.

CLUTCH LOCK

When the clutch pedal is depressed all the way, it can be locked by lifting up the lock button. The pedal will stay depressed. To release, depress the pedal. See figure 10.

BRAKE

The brake pedal is located on the right hand side of the tractor and is operated by depressing it with your right foot. See figure 11.

BRAKE LOCK

The brake lock is located on the right hand side of the tractor. To lock the brake, depress the brake pedal and lift up the lock button. The pedal will stay depressed. To release, depress the brake pedal. Always lock the brake when you park the mower. See figure 11.

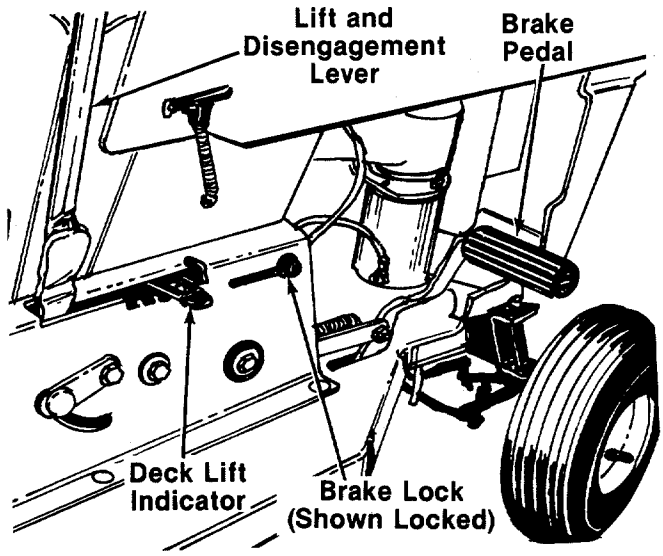


FIGURE 11.

INTERLOCKS (Not Shown)

Interlock safety switches are located on the clutch-brake pedal, and the lift and disengagement lever and gear shift lever.

Before the engine will start, the clutch-brake pedal must be depressed all the way and the lift and disengagement lever must be in the disengaged position.

Before the unit can be shifted into reverse, the lift and disengagement must be in the disengaged position.

CUTTING CONTROLS

A. LIFT AND DISENGAGEMENT LEVER

The lift and disengagement lever is used to raise and lower the cutting deck. Pulling it all the way back and locking it disengages the blades. The lift and disengagement lever **must** be in the disengaged position when starting the engine and when shifting into reverse. See figure 11.

B. DECK LIFT INDICATOR

The deck lift indicator marks the position being used for the lift lever. Select the lift lever position desired, press the indicator lever outward, move it to the position immediately below the lift-lever and release the indicator lever. See figure 11.

C. WHEEL HEIGHT ADJUSTER

Move the lever towards the wheel and set it in the desired height. See figure 12.

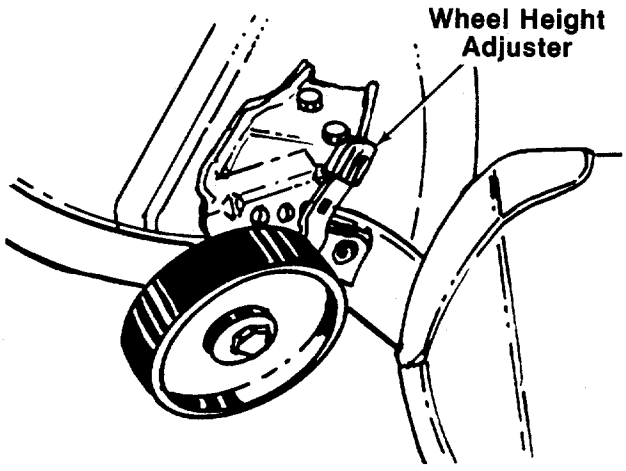


FIGURE 12.

D. SETTING THE CUTTING HEIGHT

1. Select the position for the lift lever which gives the desired cutting height. Move the deck lift indicator so that the lift lever can be returned to the same position after it is raised.
2. Set the wheel height adjusters on the deck so that the wheels are ¼ to ½ inch above the ground.

To set the cutting deck in the suspended position, set the height of cut stop in the desired cutting height and then set the deck wheels so they just clear the ground.

OPERATION

CAUTION

1. Keep all shields in place.
2. Before leaving operator's position:
 a. Shift transmission to neutral
 b. Set parking brake
 c. Disengage attachment clutch
 d. Shut off engine
 e. Remove ignition key
3. Wait for all movement to stop before servicing machine.
4. Keep people and pets a safe distance away from machine.
5. Look to the rear before backing up.

TIRE PRESSURE

For shipping purposes, the tires on your unit may be over-inflated. Tire pressure should be reduced before unit is put into operation. Recommended operating tire pressure should be 10 p.s.i.

Check sidewall of tire for manufacturer's maximum tire pressure. If this information does not appear on your tire, maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.

STARTING THE ENGINE

1. Service the engine with oil and gasoline as described in the engine manual.
2. Depress the brake pedal and set the parking brake lock. See figure 9.
3. Depress the clutch pedal and set the clutch lock. See figure 10.
4. Place the lift and disengagement lever in the DISENGAGED position. See figure 11.

NOTE

This unit is equipped with a safety interlock system for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the clutch pedal is depressed and the lift and disengagement lever is in the disengaged position. In addition the lift and disengagement lever must be in the disengaged position when the unit is put into reverse or the engine will shut off.

WARNING

Do not operate the lawn tractor if the interlock system is malfunctioning because it is a safety device, designed for protection.

5. Set the throttle control in the CHOKE position. See figure 9.
6. Turn the ignition key to the "START" position. When the engine is running, let the key return to the "ON" position. See figure 9.
7. Move the throttle control to desired engine speed.

STOPPING THE ENGINE

Turn the ignition key to the left to the "OFF" position. Remove the key to prevent accidental starting.

NOTE

A brief break-in period is essential to ensure maximum engine and mower life. The break-in consists of running the engine at half speed for a period of time required to use one tank of gasoline. It is also recommended to change crankcase oil after the first 5 hours of operation.

IMPORTANT

If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the unit for any damage, and repair the damage before restarting and operating the mower.

OPERATING THE MOWER

1. Set the desired cutting height.
2. Start the engine as instructed in previous column.
3. Move throttle control to desired engine speed.
4. Depress the clutch and brake pedals to release the locks and shift into the desired gear.

NOTE

Do **not** force the gear shift lever!

5. Release clutch and brake pedals slowly to put unit into motion.

6. Depress the clutch and brake pedals when stopping and shifting gears.

NOTE

Unit is equipped with separate brake and clutch pedals. It is necessary to disengage clutch when applying brakes to stop.

7. The lawn tractor is brought to a stop by depressing the clutch and brake pedals. The drive belt will be disengaged and the brake will be applied.

CAUTION

If the unit is not to be used for a long period, place the gear shift lever in NEUTRAL, stop the engine, set the brake lock and remove the key. DO NOT leave the machine on an incline.

OPERATING THE CUTTING BLADES

The cutting blades may be engaged while the lawn tractor is moving or standing still. DO NOT engage the cutting blades abruptly as the sudden belt tension on the pulley may cause the engine to stall.

WARNING

When the blade drive is engaged, keep feet and hands away from the discharge opening, the blades or any part of the deck.

Move the lift and disengagement lever into the DISENGAGED position to raise the deck and disengage the blades.

NOTE

When the machine is used for other than mowing operations, the blade drive should be disengaged.

GRASS CATCHER Model No. 015 is available as optional equipment for the lawn tractor shown in this manual.

WARNING

The mower should not be operated without the entire grass catcher or chute deflector in place.

NOTE

Under normal usage bag material is subject to wear, and should be checked periodically. Be sure any replacement bag complies with the mower manufacturer's recommendations.

For replacement bags, use only factory authorized replacement bag No. 764-0121.

ADJUSTMENTS

SEAT ADJUSTMENT

The seat may be adjusted to one of several positions. Refer to seat installation section of assembly instructions.

WHEEL ADJUSTMENT

The caster (forward slant of the king pin) and the camber (tilt of the wheels out at the top) require no adjustment. Automotive steering principles have been used to determine the caster and camber on the tractor. The front wheels should toe-in 1/8 inch.

To adjust the toe-in, follow these steps.

1. Remove the hairpin cotter from ferrule, and drop the tie rod end from the wheel bracket. See figure 13.
2. Loosen the hex jam nut on tie rod.
3. Adjust the tie rod assembly for correct toe-in.

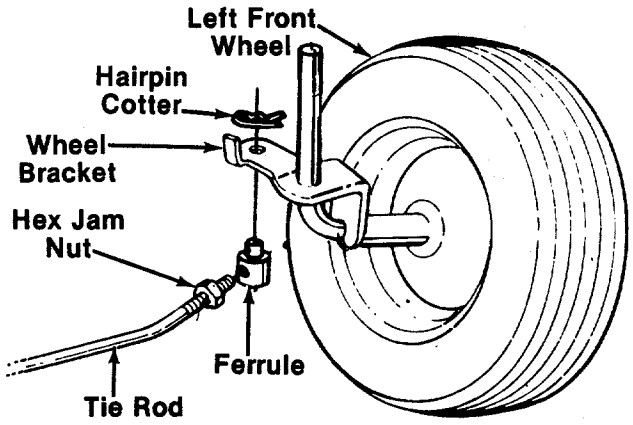


FIGURE 13.

Dimension "B" should be approximately 1/8" less than Dimension "A." See figure 14.

A.) To increase Dimension "B," screw ferrule onto tie rod end.

B.) To decrease Dimension "B," unscrew ferrule from tie rod end.

C.) Reassemble tie rod. Check dimensions. Readjust if necessary.

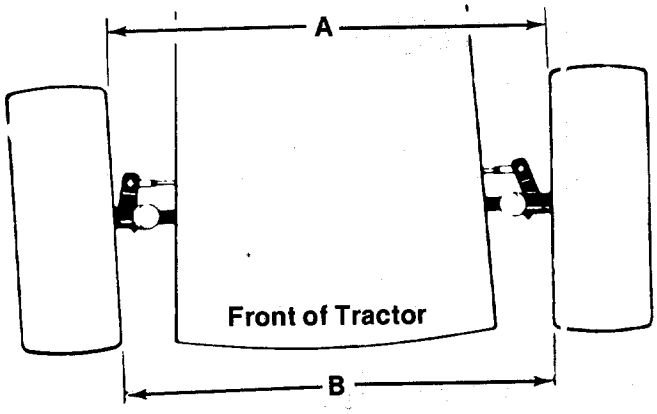


FIGURE 14. TOE-IN DIAGRAM

CHAIN ADJUSTMENT

After the first five hours of operation, the initial slack should be removed from the chain. The chain should be tight enough so that it deflects approximately ½" when it is depressed with the thumb.

To tighten the chain, loosen the four locking nuts on each side of the rear axle. See figure 15.

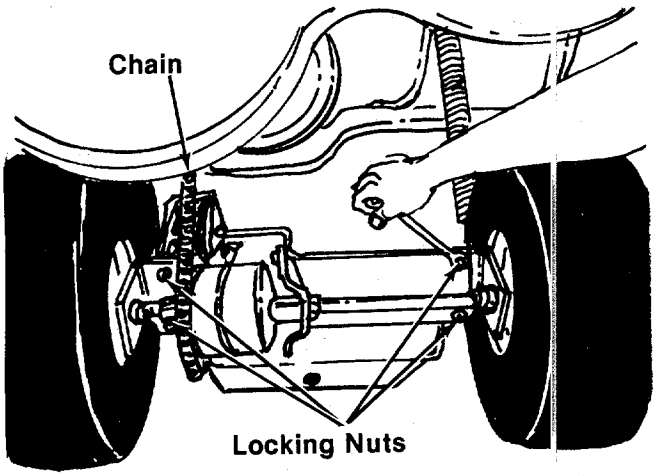


FIGURE 15.

Tighten the adjusting nuts until the proper chain tension is obtained. See figure 16.

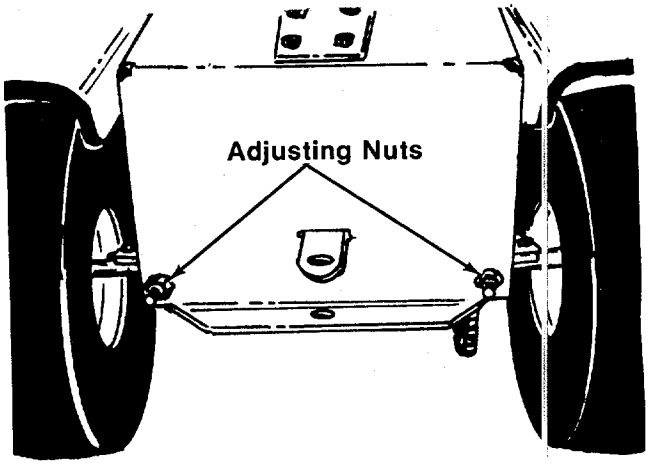


FIGURE 16.

Tighten the locking nuts on the rear axle. See figure 15.

CARBURETOR ADJUSTMENT

WARNING

If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches, and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustment may be required to compensate for differences in fuel, temperature, altitude and load. To adjust the carburetor, refer to the separate engine manual packed with your unit.

BRAKE ADJUSTMENT

During normal operation of this machine, the brake is subject to wear and will require periodic examination and adjustment.

CAUTION

Do not have the engine running when you adjust the brake.

The brake is located by the right rear wheel inside the frame. To adjust the brake, remove the cotter pin. Tighten the castle nut one half turn and then test the brakes. After attaining the proper adjustment, replace the cotter pin. See figure 17.

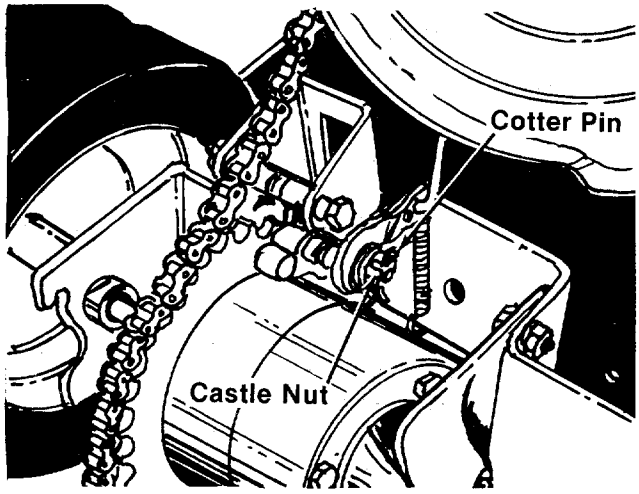


FIGURE 17.

LUBRICATION

STEERING GEARS

Lubricate teeth of steering gears with automotive multi-purpose grease after every 25 hours of operation or once a season.

STEERING SHAFT

Lubricate steering shaft at least once a season with light oil.

DIFFERENTIAL

The differential is lubricated at the factory with 3 ounces of high temperature grease (450°F.). The grease should only be checked or replaced if the differential is disassembled for repair.

TRANSMISSION

The tranmission is lubricated and sealed at the factory and does not require checking. If disassembled for any reason, lubricate with 12 oz. of E.P. Lithium grease.

FRONT WHEELS

The front wheels are provided with grease fittings. Lubricate at least once a season with automotive multi-purpose grease.

PIVOT POINTS

Lubricate all pivot points with light oil at least once a season.

MAINTENANCE

WARNING

Disconnect the spark plug wire and ground against the engine before performing any repairs or maintenance.

CRANKCASE OIL

Check the oil level in the crankcase before each use of the machine and after every five hours of operation. Oil level should be maintained as instructed in the separate engine manual.

After the first five hours of operating a new engine, drain the oil from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil every 25 hours of operation. Refer to the engine manual.

AIR CLEANER

Under normal operating conditions, the air cleaner, located on top of the carburetor, must be serviced after every ten hours of use. Under extremely dusty operating conditions, the air cleaner must be serviced after every hour of operation. To service the air cleaner, refer to the separate engine manual packed with your unit.

CLEANING ENGINE AND BLADE HOUSING

Any fuel or oil spilled on the machine should be wiped off promptly. Grass, leaves, and other dirt must not be left to accumulate around the cooling fins of the engine or on any part of the machine.

Clean the underside of the blade housing after each mowing.

SPARK PLUG

The spark plug should be cleaned and the gap reset once a season. Spark plug replacement is recommended at the start of each mowing season; check engine manual for correct plug type and gap specification.

CUTTING BLADE

A. Removal for Sharpening or Replacement

WARNING

Be sure to disconnect and ground the spark plug wire and remove ignition key before working on the cutting blade to prevent accidental engine starting.

1. Remove the large bolt and lock washer which holds the blade and adapter to the blade spindle.
2. Remove the blade and adapter from the spindle. Be careful not to lose the key on the spindle.
3. If the blade or blade adapter needs replacing, remove the two small bolts, lock washers and nuts which hold the blade to the adapter.

B. Sharpening

Remove the cutting blade by following the directions of the preceding section.

When sharpening the blade, follow the original angle of grind as a guide. It is **extremely important** that each cutting edge receives an equal amount of grinding to prevent an unbalanced blade. An unbalanced blade will cause excessive vibration when rotating at high speeds, may cause damage to the mower and could break, causing personal injury.

The blade can be tested for balance by balancing it on a round shaft screwdriver. Remove metal from the heavy side until it balances evenly.

NOTE

It is recommended that the blade always be removed from the adapter for the best test of balance.

C. Reassembly

Before reassembling the blade and the blade adapter to the unit, lubricate the spindle and the inner surface of the blade adapter with light oil. Lubricating the bolt holes, bolts and inner surface of the nuts with light oil is also recommended. A 4 oz. plastic bottle of light oil lubricant is available. Order part number 737-0170. Engine oil may also be used.

When replacing the blade, be sure to install the blade with the side of the blade marked "Bottom" (or with part number) facing the ground when the mower is in the operating position. Make certain key is in place on the crankshaft.

Blade Mounting Torque

3/8" Dia. Bolt 375 in. lb. min., 450 in. lb. max.
5/16" Dia. Bolt 150 in. lb. min., 250 in. lb. max.

To insure safe operation of your unit, ALL nuts and bolts must be checked periodically for correct tightness.

FUEL FILTER

Your unit is equipped with a replaceable in-line fuel filter. Replace filter whenever contamination or discoloration is noticed. Order replacement filter through your engine authorized service dealer.

BELT REMOVAL AND REPLACEMENT

WARNING

Disconnect the spark plug wire and ground it against the engine.

NOTE

Figures 18 and 20 are shown with the unit tipped up for clarity. It is not necessary to tip the unit to remove the belts.

Removing the Deck Belt

1. Place the lift lever in the disengaged position.
2. Remove the shoulder bolt and belt keeper from the engine pulley belt guard. See figure 18.

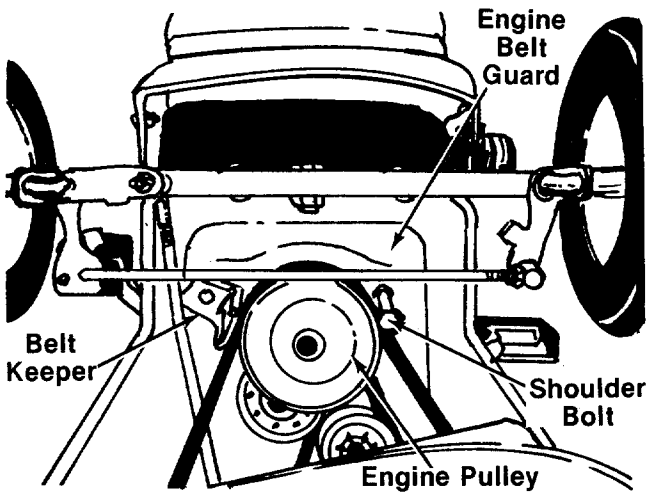


FIGURE 18.

3. Unhook the deck belt from the engine pulley.
4. Put the lift lever in the engaged position.
5. Disconnect the two tension springs on the rear of the deck.
6. Disconnect the six deck links by removing the hairpin cotters and flat washers.
7. Slide the deck from beneath the lawn tractor.
8. Remove the belt guards at each deck pulley by removing the hex bolts, lock washers and hex nuts. See figure 19.
9. Remove and replace the belt, following the instructions in reverse order.

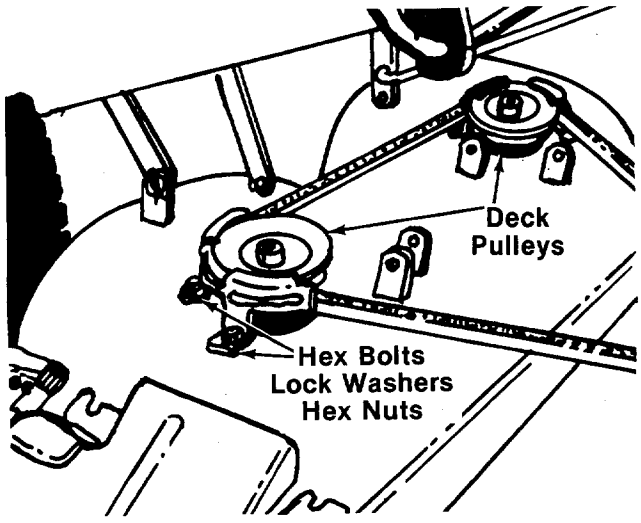


FIGURE 19.

Removing the Drive Belt

1. Follow steps 1 through 3 on removing the deck belt.

2. Remove the engine belt guard from the engine pulley by removing the two front engine bolts. See figure 18.
3. Remove the two belt guards from the transmission pulley. See figure 20.
4. Remove the V-idler pulley. See figure 20.
5. Remove and replace the transmission belt and reinstall pulley.

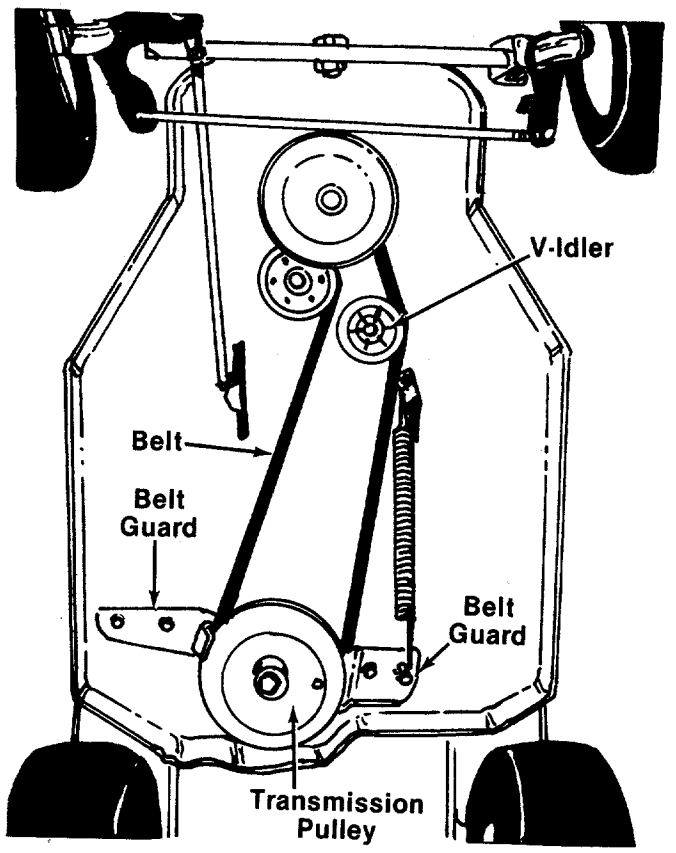


FIGURE 20.

BATTERY REMOVAL OR INSTALLATION

WARNING

When removing the battery, follow this order of disassembly to prevent the screwdriver from shorting against the frame.

1. Remove the Negative cable.
2. Remove the Positive cable.

To install a battery:

1. Attach the Positive cable.
2. Attach the Negative cable.

JUMP STARTING

1. Attach the first jumper cable from the Positive terminal of the good battery to the Positive terminal of the dead battery.
2. Attach the second jumper cable from the Negative terminal of the good battery to the FRAME OF THE UNIT WITH THE DEAD BATTERY.

WARNING

Failure to use this starting procedure could cause sparking, and the gas in either battery could explode.

BATTERY MAINTENANCE

1. Check periodically (every two weeks or before and after charging) to be sure electrolyte level is above the lowest line on battery. Add only distilled water or a good quality drinking water. NEVER add additional acid or other chemicals to battery after initial activation.
2. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225, remove battery and recharge.
3. Coat the terminals and exposed wiring with a thin coat of grease or petroleum jelly for longer service and protection against electrolyte corrosion.
4. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.

BATTERY STORAGE

1. Charge battery using normal methods. NEVER store discharged battery as it will not recover.
2. When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended.
3. Store in cold, dry place.
4. Recharge battery whenever the specific gravity is less than 1.225, before returning to service, or every two months, whichever occurs first.

COMMON CAUSES FOR BATTERY FAILURE ARE:

1. Overcharging
2. Undercharging
3. Lack of water
4. Loose holds downs and/or corroded connections
5. Excessive loads
6. Battery electrolyte substitutes
7. Freezing of electrolyte

NOTE

THESE FAILURES DO NOT CONSTITUTE WARRANTY.

INSTALLATION OF TIRE TO RIM

WARNING

The following procedure must be followed when removing or installing a tire to the rim.

1. Be sure rim is clean and rust free.
2. Lubricate both the tire and rim generously.
3. Never inflate to over 30 p.s.i. to seat beads. Excessive inflation pressure when seating beads may cause tire/rim assembly to burst with force sufficient to cause serious injury.

OFF-SEASON STORAGE

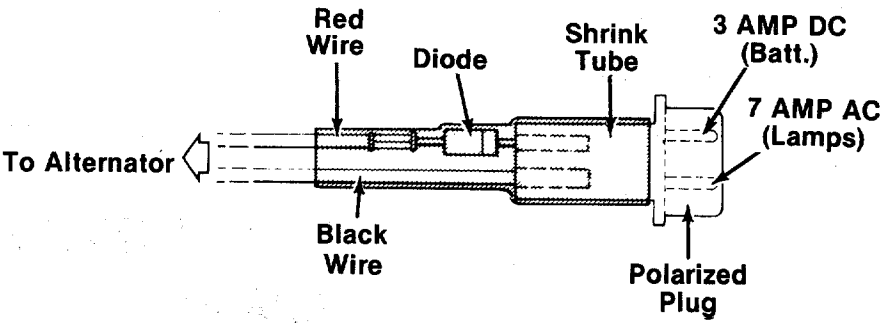
If the machine is to be inoperative for a period longer than 30 days, prepare for storage as follows.

1. Clean the engine and the entire unit thoroughly.
2. Lubricate all lubrication points. Wipe the entire machine with an oiled rag to protect the surfaces.
3. Refer to the engine manual for correct engine storage instructions. The engine must be completely drained of fuel to prevent gum deposits from forming on essential carburetor parts, fuel lines and fuel tanks.
4. Refer to battery storage instructions in previous column.
5. Store unit in a clean, dry area.

NOTE

When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially any chains, springs, bearings and cables.

TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
Engine will not crank	Battery installed incorrectly	The battery must be installed with the negative, identified at the terminal post by (Neg, N or -), grounded. The positive (Pos, P or +) attaches to the large cable from the solenoid. The small red wire from the fuse holder or circuit breaker is also attached to the positive terminal.
	Blown fuse or circuit breaker	Replace fuse with 7½ amp. fuse ¼ x 1¼" lg. Circuit breaker will reset itself when it cools off. Fuses or circuit breakers seldom open or fail without a reason. The problem must be corrected. Check for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrican's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part.
	Battery is dead or weak	Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F. (1.215 s.g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit. Check for grounded wire. (3) Charging system not working, either engine alternator or trickle charger. **Trickle Charger.** Check with multimeter. Charger 725-0578—input 120 V A.C., no load output 13.5 V D.C., rated load current 1 amp. Charger 725-0507—input 120 V A.C., no load output 17.4 V D.C., rated load current 1/2 amp. **Alternator** (dual or single circuit) The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp. at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug on the engine side.  The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the battery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp. D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine. The lamp should light. If it does not,the alternator (stator) or lead wire is bad and should be replaced.
	Mechanical failure. (Wires and switches)	The interlock system includes two mechanical activated switches which are wired in series in the circuit used to energize the starter solenoid. While testing the interlock system, you will make the mower temporarily unsafe by permitting the engine to be started with the blade and clutch engaged. WARNING: While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal on the solenoid. **If the engine does not crank:** (1) There is a loose connection or poor ground. (2) The solenoid may be bad. The solenoid can be checked by using a heavy wire (#8 gauge minimum) and jumping between the two large terminals. If the engine cranks, the solenoid is bad. (3) If the engine does not crank when you jump the solenoid, have the starter motor tested by an authorized engine dealer. If the engine does crank, the problem is with one of the safety switches, ignition switch or the wire between the fuse holder (or circuit breaker) and the small terminal on the solenoid. Note: Look for a poor connection at the switches or a defective switch. Replace if necessary.
Engine cranks but will not start	Throttle or choke not in starting position	Check owner's guide for correct position for throttle control and choke (if separate control) for starting.

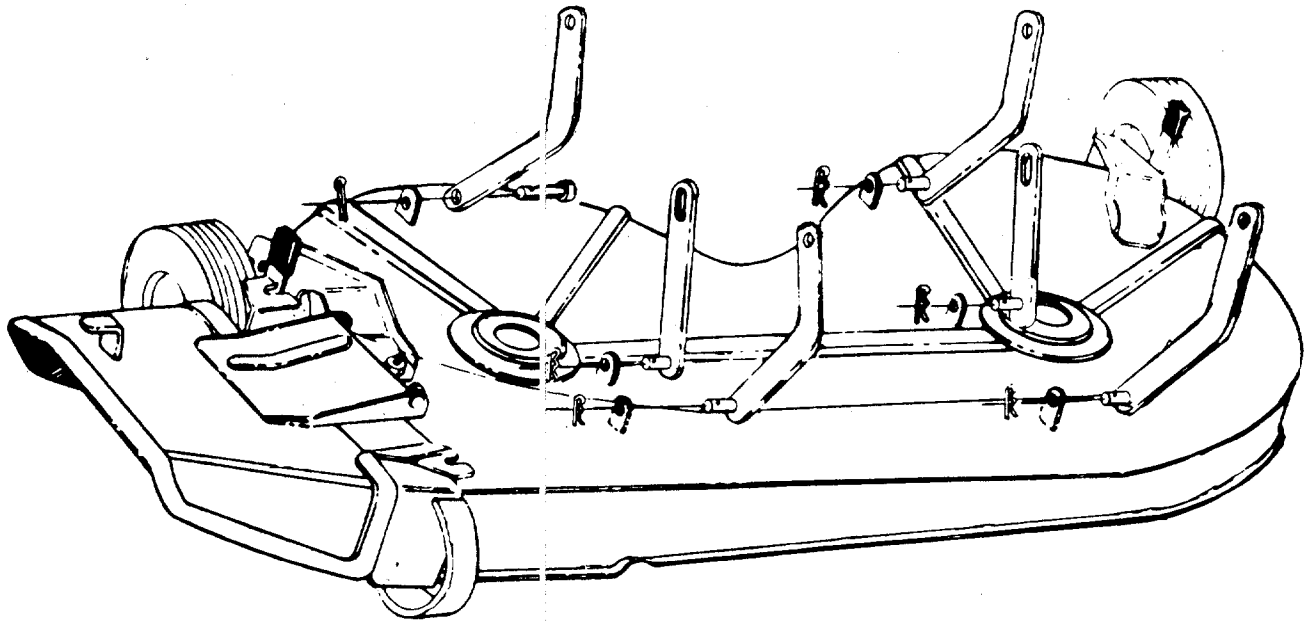
TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
	No spark to spark plug	Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have engine repaired at authorized engine service dealer. Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not.
	No fuel to the carburetor	Gasoline tank empty. Fill. Fuel valve shut off. Open valve. Valve is located either at the bottom of the fuel tank or on the carburetor. Fuel line plugged. Remove and clean.
	Air filter dirty	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer.
Engine smokes	Engine loses crankcase vacuum	Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace.
Excessive vibration	Bent or damaged blade spindle	**Stop engine immediately.** Check all pulleys, blade adapters, keys and bolts for tightness and damage. Tighten or replace any damaged parts.
	Bent blade	**Stop engine immediately.** Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips	Engine speed low Transmission selection Blades short or dull	Throttle must be set between 3/4 and full throttle. Use lower transmission gear. The slower your ground speed, the better the quality of cut. Sharpen or replace blades (uncut strip problem only).

DECK LINKAGE

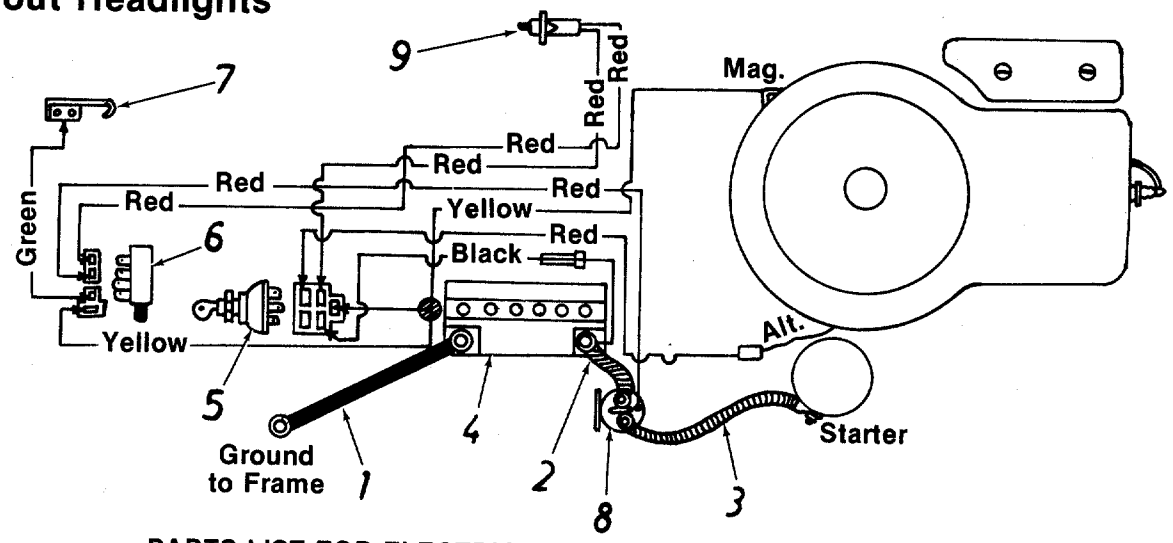
NOTE

The illustration below shows proper deck link hook-up. If the deck is removed for any reason, use the illustration for correct assembly.



Models 395, 397 and 398

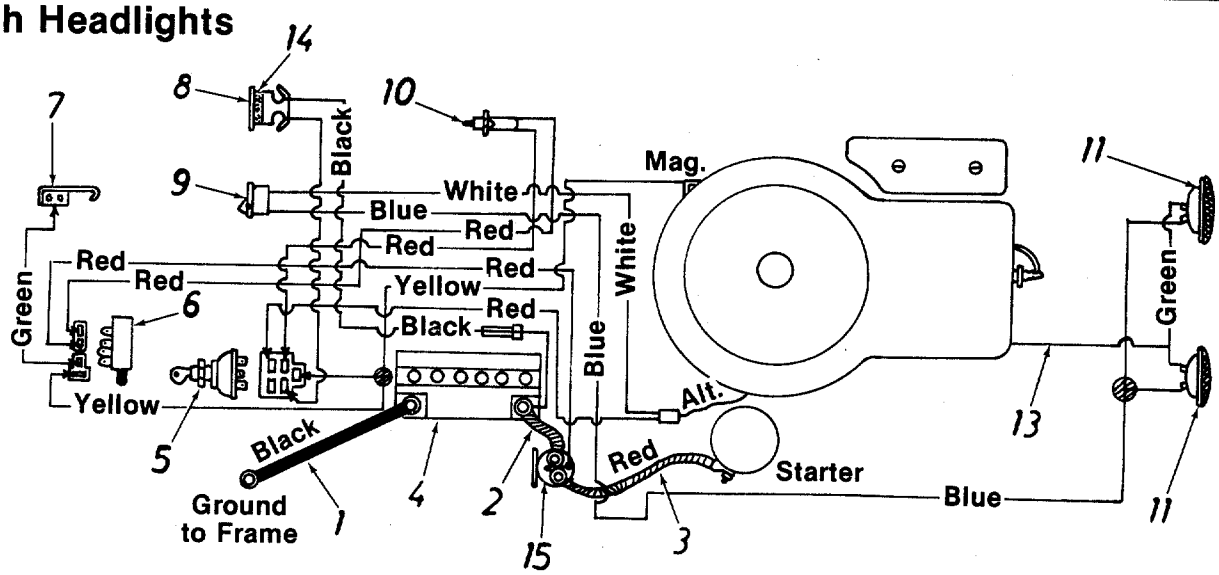
Without Headlights



PARTS LIST FOR ELECTRICAL SYSTEM— WITHOUT HEADLIGHTS

REF. NO.	PART NO.	DESCRIPTION	NEW PART	REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	725-0977	Ground Wire—11.5" Lg.		6	725-0819	Safety Switch (Blade)	
2	725-0150	Electric Wire (Red)—11.5" Lg.		7	725-0759	Spring Switch (Reverse)	
3	725-0122	Electric Wire—7.25" Lg.		8	725-0771	Solenoid	
4	725-0514	Battery		9	725-0268	Safety Switch (Clutch)	
5	725-0267	Ignition Switch		—	725-1026	Wire Harness Comp.	

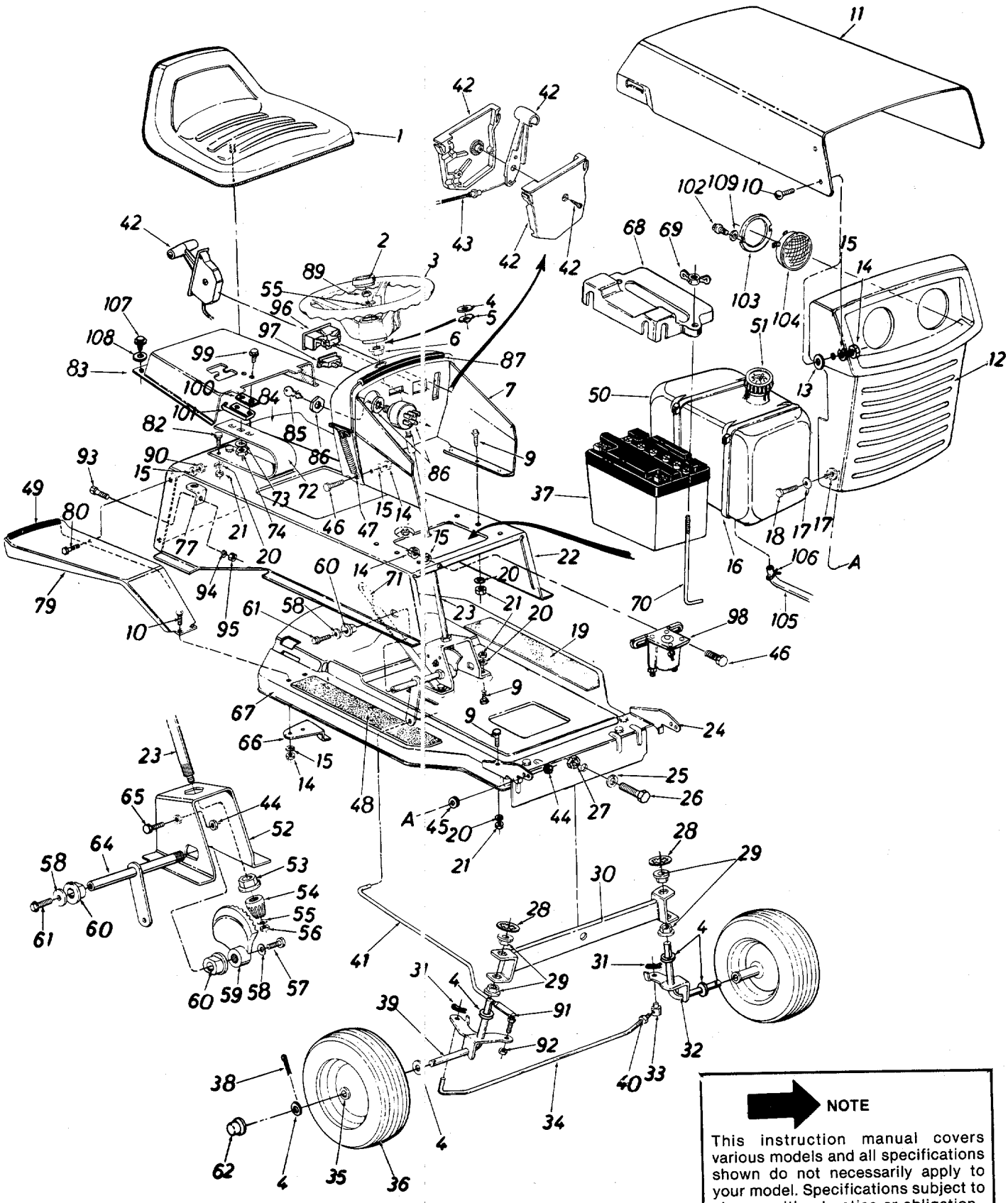
With Headlights



PARTS LIST FOR ELECTRICAL SYSTEM— WITH HEADLIGHTS

REF. NO.	PART NO.	DESCRIPTION	NEW PART	REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	725-0977	Ground Wire—11.5" Lg.		8	725-0925	Ammeter	
2	725-0150	Electric Wire (Red)—11.5" Lg.		9	725-0634	Light Switch	
3	725-0122	Electric Wire—7.25" Lg.		10	725-0268	Safety Switch (Clutch)	
4	725-0514	Battery		11	725-0222	Headlight	
5	725-0267	Ignition Switch		13	725-1024	Ground Wire	
6	725-0819	Safety Switch (Blade)		14	722-0135	Foam Strip	
7	725-0759	Spring Switch (Reverse)		15	725-0771	Solenoid	
				—	725-1023	Wire Harness Comp.	

Models 395, 397 and 398



NOTE

This instruction manual covers various models and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

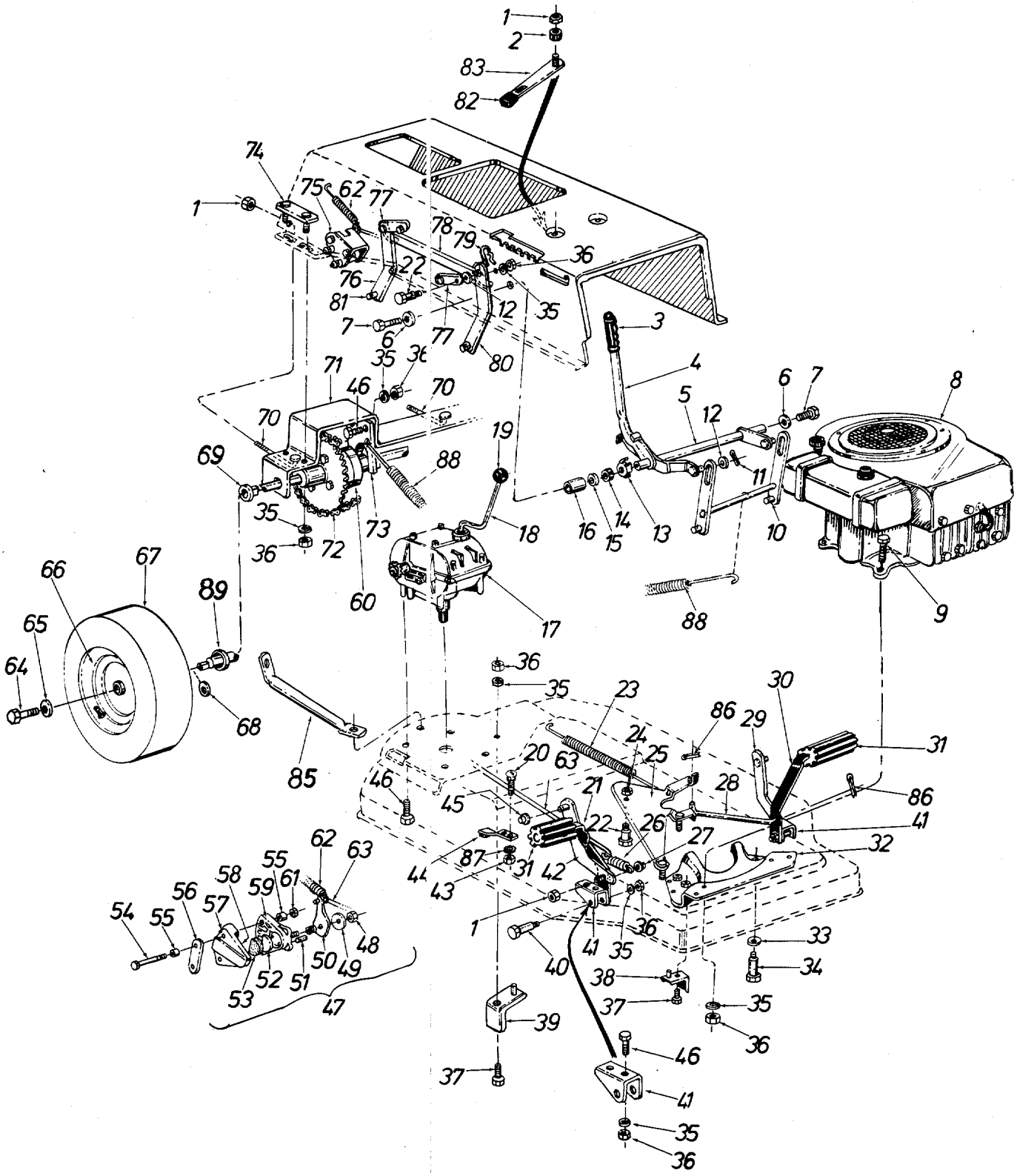
Models 395, 397 and 398

PARTS LIST FOR MODELS 395, 397 AND 398 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	757-0264		Seat Assembly	
2	731-0220		Cap for Steering Wheel	
3	731-0219		12" Dia. Steering Wheel	
4	736-0156		Fl-Wash. .64 I.D. x 1.12 O.D.	
5	736-0174		Wave Wash. .66 I.D. x .88	
6	748-0227		Hex Flange Brg. .630 I.D.	
7	16037		Dash Panel Ass'y.†	
	16038		Dash Panel Ass'y. w/Lights†	
9	710-0198		Hex Sems Scr. 5/16-18 x .75 Lg.*	
10	710-0255		Truss Mach. Scr. 1/4-20 x .75" Lg.*	
11	11836	—462	Hood	
12	731-0562		Grille w/Lights†	
	731-0563		Grille†	
13	736-0142		L-Wash. .281" I.D. x .50" O.D.	
14	712-0287		Hex Nut 1/4-20 Thd.*	
15	736-0329		L-Wash. 1/4" Scr.*	
16	726-0209		Cable Tie	
17	736-0300		Flat Wash. .39" I.D. x .87" O.D.	
18	710-0253		Hex Bolt 3/8-16 x 1.0" Lg.*	
19	723-0305		Foot Mat—L.H.	
20	736-0119		L-Wash. 5/16" Scr.*	
21	712-0267		Hex Nut 5/16-18 Thd.*	
22	13880	—462	Upper Frame	
23	738-0307		Steering Shaft	
24	12746	—462	Front Pivot Bracket	
25	736-0158		L-Wash. 5/8" Scr.*	
26	710-0312		Hex Bolt 5/8-18 x 1.31—Special	
27	712-0923		Hex Jam Nut 5/8-18 Thd.	
28	726-0159		Push Nut .625" Shaft	
29	741-0225		Hex Flange Brg.	
30	13274	—462	Pivot Bar Ass'y.	
31	714-0115		Cot-Pin 1/8" Dia. x 1.00" Lg.*	
32	14453		Axle Ass'y.—Front—L.H.	
33	711-0198		Ferrule	
34	747-0144		Tie Rod	
35	741-0313		Flange Bearing .63 I.D.	
36	734-1184		Front Wheel Ass'y.—Comp. 10.5 x 4.0	
37	725-0514		12 V Battery	
38	714-0470		Cot-Pin 1/8" Dia. x 1.25" Lg.*	
39	14452		Axle Ass'y.—Front—R.H.	
40	712-0711		Hex Jam Nut 3/8-24 Thd.	
41	711-0625		Steering Rod	
42	831-0692		Throttle Control Box Ass'y.	
43	746-0501		Throttle Control Wire	
44	712-0375		Hex Cent. L-Nut 3/8-16 Thd.	
45	748-0190		Spacer	
46	710-0289		Hex Scr. 1/4-20 x .50" Lg.*	
47	723-0296		Hood Lock Ass'y.	
48	723-0304		Foot Mat—R.H.	
49	731-0497		Edge Strip (6.5" Lg.)	
50	731-0172		Gas Tank	
51	723-0155		Gas Gauge	
52	12850		Steering Gear Support Brkt.	
53	741-0226		Hex Flange Brg. .50 I.D.	
54	748-0237		Pinion Gear	
55	736-0242		Bell-Wash. .357 I.D. x .88 O.D.	
56	712-0429		Hex Ins. L-Nut 5/16-18 Thd.	
57	710-0180		Hex Scr. 3/8-24 x .75" Lg.*	
58	736-0105		Bell-Wash.	
59	748-0236		Bevel Gear	
60	741-0199		Plastic Flanged Brg.	
61	710-0325		Hex Scr. 3/8-24 x .50" Lg.*	
62	731-0484		Hub Cap	
64	12749		Steering Arm Shaft Ass'y.	
65	710-0670		Hex Scr. Nylon 3/8-16 x 1.25" Lg.	
66	11055		Transmission Belt Guard	
67	13879	—462	Lower Frame	
68	731-0708		Battery Cover	
69	712-0113		Wing Nut 1/4-20 Thd.*	
70	711-0222		Hold-Down Rod	
71	12934		Transmission Support Brkt.	
72	732-0256		Seat Spring 3.25 High	
73	736-0921		L-Wash. 1/2" Scr.*	
74	712-0206		Hex Nut 1/2-13 Thd.*	
77	09963	—462	Hitch Bracket	
79	11002	—462	Rear Fender	
80	710-0195		Hex Scr. 1/4-28 x .62" Lg.*	
82	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.*	
83	13881	—462	Transmission Panel	
84	11002	—462	Rear Fender	
85	725-0201		Ignition Key Only	
86	725-0267		Ignition Switch	
87	731-0511		Trim Strip 12" Lg.	
90	712-0138		Hex Nut 1/4-28 Thd.*	
91	723-0156		Ball Joint Ass'y. 3/8-24 Thd.	
92	712-0116		Hex Ins. L-Nut 3/8-24 Thd.	
93	710-0216		Hex Scr. 3/8-16 x .75" Lg.*	
94	736-0169		Lock Washer 3/8" I.D.*	
95	712-0798		Hex Nut 3/8-16 Thd.*	
96	725-0925		Ammeter†	
97	725-0634		Light Switch†	
98	725-0771		Solenoid	
99	710-0227		Hex AB-Tap Scr. #8 x .50" Lg.	
100	726-0222		Insulator Nut Plate	
101	725-0759		Spring Switch	
102	710-0892		Hex Wash. Hd. Scr. 1/4" x .62" Lg.†	
103	09960		Headlight Retainer†	
104	725-0222		Headlight	
105	751-0173		Gas Line	
106	726-0207		Hose Clamp	
107	710-0599		Hex Wash. Hd. Scr. 1/4-20 x .50" Lg.	
108	736-0270		Bell-Wash. .265" I.D. x .75" O.D.	
109	736-0463		Flat Wash. .281" I.D. x .625" O.D. x .106	

†Optional

Models 395, 397 and 398



NOTE: If for any reason, disc brake is disassembled, be sure round end of push pins (Ref. No. 51) is toward the cam lever (Ref. No. 50).

Models 395, 397 and 398

PARTS LIST FOR MODELS 395, 397 AND 398 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	712-0429		Hex Ins. L-Nut 5/16-18 Thd.	
2	735-0126		Rubber Wash. .33 I.D. x .87	
3	08118		Grip Finger—Black	
4	749-0212		Lift Handle—R.H.	
5	13630		Lift Handle Brkt. Ass'y.	
6	736-0219		Belleville Wash. .40 I.D. x 1.13 O.D.	
7	710-0216		Hex Bolt 3/8-16 x .75" Lg.*	
8	—		Engine	
9	710-0442		Hex Bolt 5/16-18 x 1.50" Lg.*	
10	15947		Lockout Link Ass'y.	
11	714-0115		Cotter Pin 1/8" Dia. x 1.00"*	
12	736-0192		Fl-Wash. .531 I.D. x .93 O.D.	
13	11029		Handle Pivot Brkt.	
14	735-0195		Rubber Wash.	
15	736-0237		Flat-Wash.	
16	748-0273		Spacer .632 I.D. x .88 O.D.	
17	717-0806		Three Speed Trans.—Comp.	
18	747-0172		Shift Lever	
19	720-0165		Ball Knob	
20	710-0134		Carr. Bolt ¼-20 x .62" Lg.*	
21	14219		Brake Pedal Ass'y.	
22	738-0140		Shld. Scr. .431 Dia. x .18"	
23	732-0191		Spring (Idler) .75 O.D. x 11.0" Lg.	
24	712-0116		Hex Ins. L-Nut 3/8-24 Thd.	
25	12446		Idler Brkt. Ass'y.	
26	732-0245		Brake Spring	
27	726-0100		Push Nut 3/8" Dia. Rod	
28	11061		Clutch Rod	
29	11057		Clutch Lockout Lever Ass'y.	
30	14220		Clutch Pedal Ass'y.	
31	735-0201		Foot Pad (Clutch and Brake)	
32	12654		Engine Belt Guard Ass'y.	
33	736-0105		Bell-Wash. .400 I.D. x .88	
34	738-0215		Shld. Bolt .498 Dia. x 3.00" (30" Deck)	
	738-0411		Shld. Bolt. .498 Dia. x 3.25" (34" Deck)	
35	736-0119		L-Wash. 5/16" Scr.*	
36	712-0267		Hex Nut 5/16-18 Thd.*	
37	710-0259		Hex Sems Scr. 5/16-18 x .62" Lg.*	
38	12160		Belt Keeper Ass'y.	
39	10426		Belt Keeper Ass'y.	
40	738-0213		Shld. Bolt .498 Dia. x 1.450"	
41	11039		Pedal "U" Brkt. Ass'y.	
42	11056		Parking Brake Lever Ass'y.	
43	712-0287		Hex Nut ¼-20 Thd.	
44	761-0174		Blade Brake Ass'y.	
45	726-0121		Push Cap .250 Dia.	
46	710-0198		Hex Sems Scr. 5/16-18 x .75" Lg.	
47	761-0130		Disc Brake Ass'y.—Comp.	
48	HH-02-03631		Hex Lock Nut	
49	HH-03-03032		Washer	
50	HH-18-03493		Cam Lever	
51	HH-05-03034		Push Pin	
52	HH-03-03303		Disc Backup	
53	HH-15-02124		Friction Pad 1.110" Dia. x .472 Thk.	
54	710-0176		Hex Bolt 5/16-18 x 2.75" Lg.	
55	761-0133		Spacer for Disc Brake .322 I.D. x .38" Lg.	
56	11010		Brake Plate	
57	HH-12-03292		Casting—Carrier Side	
58	HH-15-03149		Friction Pad 1.110" Dia. x .245 Thk.	
59	HH-12-03292		Casting—Cam Side	
60	717-0318		Differential Ass'y. Comp.	
61	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
62	732-0157		Spring .380 O.D. x 3.25" Lg. (Brake Return)	
63	747-0107		Brake Rod .250 Dia. x 24.12" Lg.	
64	710-0627		Hex Scr. w/Lock 5/16-24 x .750" Lg.	
65	736-0242		Bell-Wash. .345" I.D. x .88"	
66	**		Rear Wheel—Rim Ass'y.	
67	**		Rear Wheel—Tire Only	
68	736-0134		Fl-Wash.	
69	741-0199		Flange Brg.	
70	710-0437		Chain Adj. Link 5/16-18 Thd.	
71	11009		Rear Axle Brkt.	
72	713-0104		#41 Chain ½" Pitch x 65 Links	
	713-0723		Master Link ½" Pitch	
73	10364		Rear Axle Plate	
74	10360		Axle Bolt Plate Ass'y.	
75	11011		Disc Brake Brkt. Ass'y.	
76	11024		Deck Link	
77	09721		Pivot Link Ass'y.	
78	11014		Connecting Lift Brkt.	
79	714-0101		Int. Cotter Pin ½" Dia.	
80	11023		Deck Link Ass'y. (3 Req'd.)	
81	711-0332		Lift Brkt. Pin	
82	11249		Ht. Adj. Knob	
83	11027		Handle Stop Brkt. Ass'y.	
85	749-0469		Reinforcement Brkt.	
86	714-0474		Cot-Pin 1/8" Dia. x ¾" Lg.	
87	736-0329		L-Wash. ¼" I.D.	
88	732-0440		Spring 14.25" Lg.	
89	750-0345		Spacer .758 I.D. x .99 O.D.	

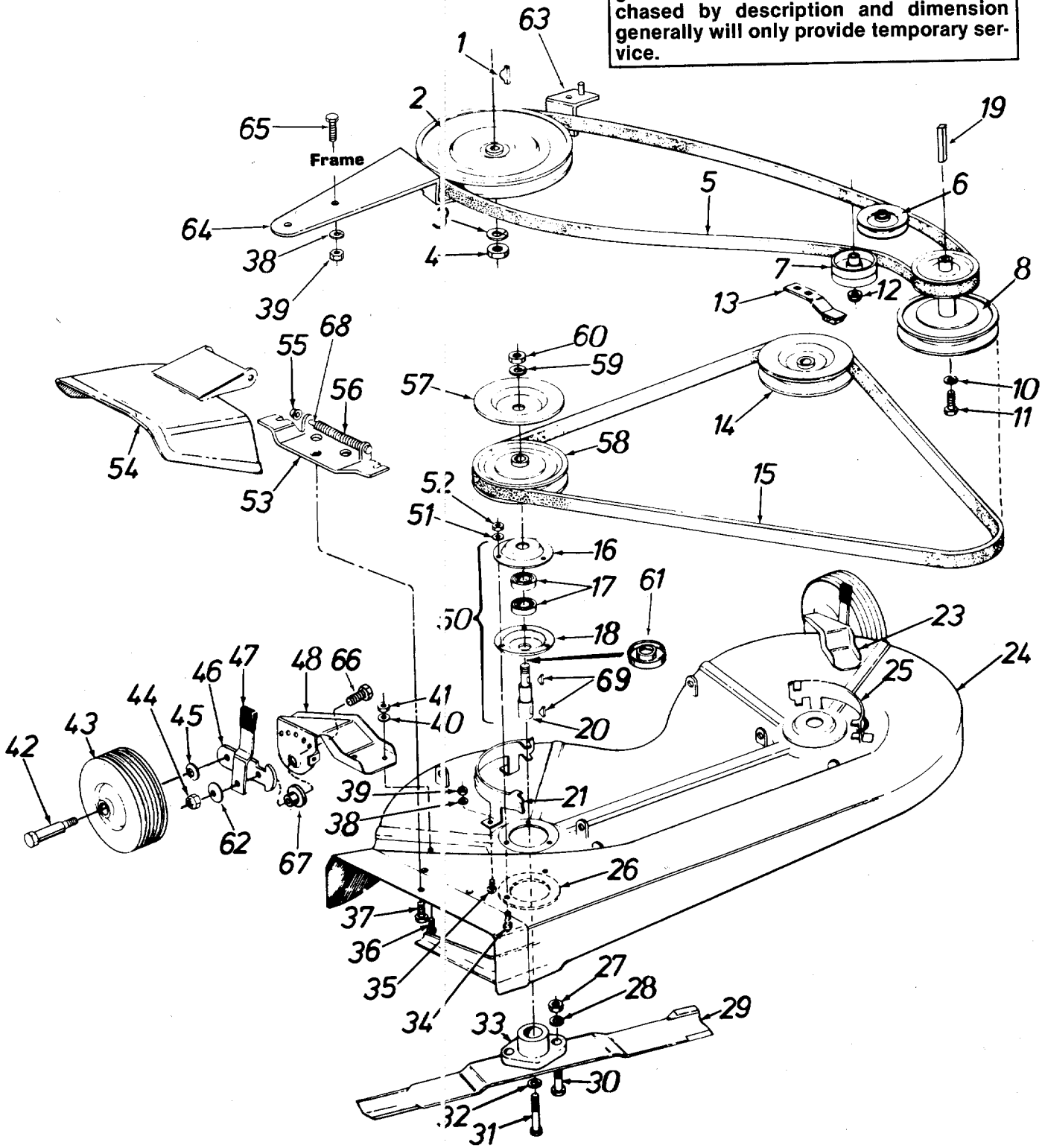
**WHEEL CHART

Description	10.5 x 4 (front)	15 x 6	16 x 6.5
Wheel Ass'y. Comp.	734-1184	734-0524	734-0591
Tire Only	734-1185	734-0427	734-0275
Rim Only	734-1183	734-0521	734-0594
Bearing	741-0313	741-0199	741-0199
Air Valve	734-0255	734-0255	734-0255
Grease Fitting	737-0146	—	—

Models 395, 397 and 398

IMPORTANT

Belts listed by Part Number are of special construction and should be used when replacement is necessary. The dimensions and description given are for general reference only and belts purchased by description and dimension generally will only provide temporary service.



Models 395, 397 and 398

PARTS LIST FOR MODELS 395, 397 AND 398 LAWN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	714-0129		#4 Hi-Pro Key 3/32 x 5/8" Dia.	
2	756-0174		Transmission Split Pulley .50 I.D.	
3	736-0921		L-Wash. ½" I.D.*	
4	712-0922		Hex Jam Nut ½-20 Thd.	
5	754-0198		"V" Belt ½ x 62" Lg.	
6	756-0116		"V" Idler 3.06 O.D.	
7	756-0217		"P" Flat Idler 2.75 O.D.	
8	756-0436		Two-Step Engine Pulley (30" Deck)	
	756-0431		Two Step Engine Pulley (34" Deck)	
10	736-0171		L-Wash. 7/16" I.D.*	
11	710-0314		Hex Bolt 7/16-20 x 1.0" Lg.	
12	712-0116		Hex Ins. L-Nut 3/8-24 Thd.	
13	761-0174		Blade Brake Ass'y. (30" Deck)	
	761-0168		Blade Brake Ass'y. (34" Deck)	
14	756-0251		Deck Pulley 4.75 O.D.	
15	754-0167		"V" Belt 21/32" x 64" Lg. (30" Deck)	
	754-0279		"V" Belt 5/8" x .65" Lg. (34" Deck)	
16	08253		Housing—Bearing	
17	741-0919		Ball Brg. .787 I.D. x 1.85 O.D.	
18	08253		Housing—Bearing	
19	714-0114		Sq. Key ¼" x 2.0" Lg.	
20	711-0255		Blade Spindle	
21	12673		Belt Guard R.H.—Deck	
23	09082		Wheel Bracket Ass'y.—L.H.	
24	13962		30" Deck Ass'y.	
	16003		34" Deck Ass'y.	
25	12672		Belt Guard L.H.—Deck	
26	09164		Deck Reinforcement Plate	
27	712-0123		Hex Nut 5/16-24 Thd.*	
28	736-0119		L-Wash. 5/16" I.D.*	
29	742-0118		15" Blade	
	742-0120		17" Blade	
30	710-0888		Hex Bolt 5/16-24 x 1.00"	
31	710-0459		Hex Bolt 3/8-24 x 1.50" H.T.	
32	736-0217		L-Wash. 3/8" I.D. H.D.	
33	748-0189		Blade Adapter	
	10769		Blade Adapter Kit	
34	710-0322		Hex Sems Scr. 5/16-18 x 1.00" Lg.*	
35	710-0289		Hex Bolt ¼-20 x .50" Lg.*	
36	710-0289		Hex Bolt ¼-20 x .50" Lg.*	
37	710-0599		Hex Wash. Hd. Bolt Scr. ¼-20 x .50" Lg.	
38	736-0329		L-Wash. ¼" I.D.*	
39	712-0287		Hex Nut ¼-20 Thd.*	
40	736-0329		L-Wash. ¼" I.D.*	
41	712-0287		Hex Nut ¼-20 Thd.*	
42	738-0373		Axle Bolt .498 Dia. x 1.53"	
43	734-0973		Wheel Ass'y.—Comp. 5 x 1.38	
44	712-0181		Hex Jam L-Nut 3/8-16 Thd.	
45	736-0105		Bell-Wash. .400 I.D. x .88 O.D.	
46	10937		Wheel Pivot Bar	
47	14082		Spring Lever Ass'y.	
48	09080		Wheel Brkt. Ass'y. R.H.	
50	09321		Blade Spindle Ass'y.—Comp.	
51	736-0119		L-Wash. 5/16" I.D.*	
52	712-0267		Hex Nut 5/16-18 Thd.	
53	11399		Adapter Plate Ass'y.	
54	11633		Chute Cover Ass'y.	
55	726-0106		Push Nut ¼" Rod	
56	732-0261		Torsion Spring	
57	09322		Blade Brake—Disc	
58	756-0251		Deck Pulley 4.75 O.D.	
59	736-0158		L-Wash. 5/8" I.D.*	
60	712-0261		Hex Jam Nut 5/8-11 Thd.	
61	13703		Bearing Shield	
62	736-0219		Bell-Wash.	
63	10426		Belt Keeper Ass'y.	
64	11055		Transmission Belt Guard	
65	710-0255		Truss Hd. Mach. Scr. ¼-20 x .75" Lg.	
66	710-0253		Hex Bolt 3/8-16 x 1.00" Lg.	
67	748-0279		Shoulder Spacer	
68	711-0571		Hinge Pin	
69	714-0365		#6 Hi-Pro Key 5/32 x 5/8"	
	13978		30" Deck Ass'y. Comp. (For Service Only)	
	16030		34" Deck Ass'y. Comp. (For Service Only)	

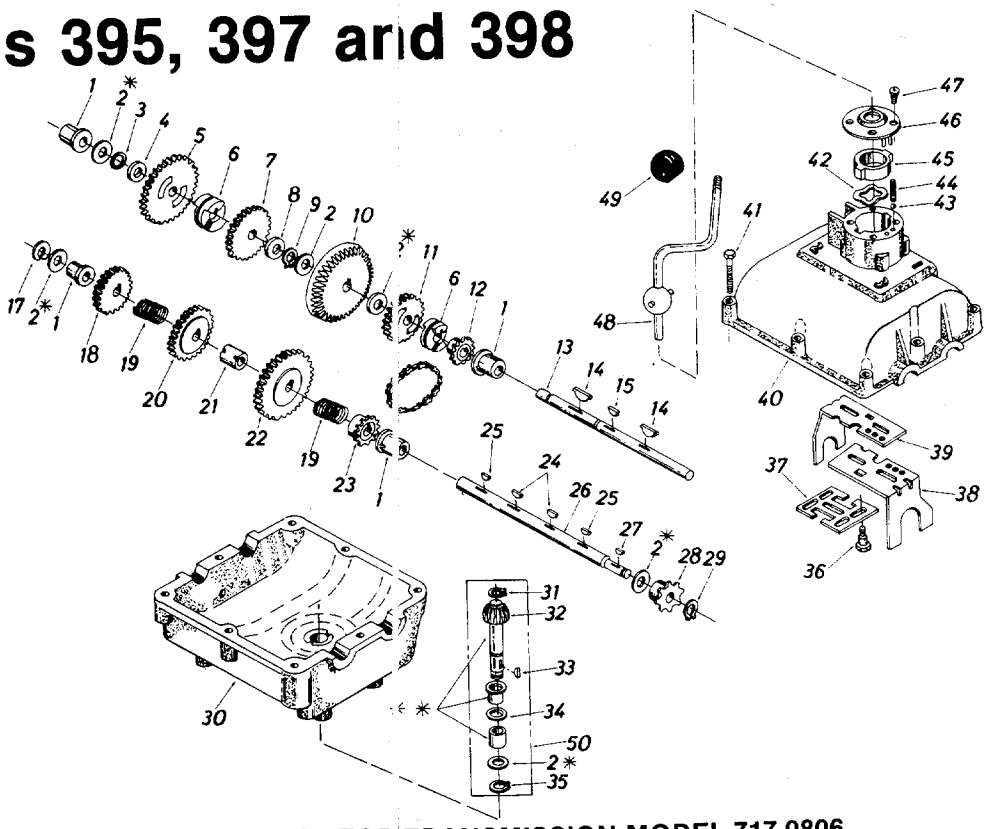
*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

(462—Red Flake) When ordering parts if color or finish is important, use color code shown at left. (e.g. Red Flake Finish—11001 (462).)

The engine is not under warranty by the mower manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."



Models 395, 397 and 398

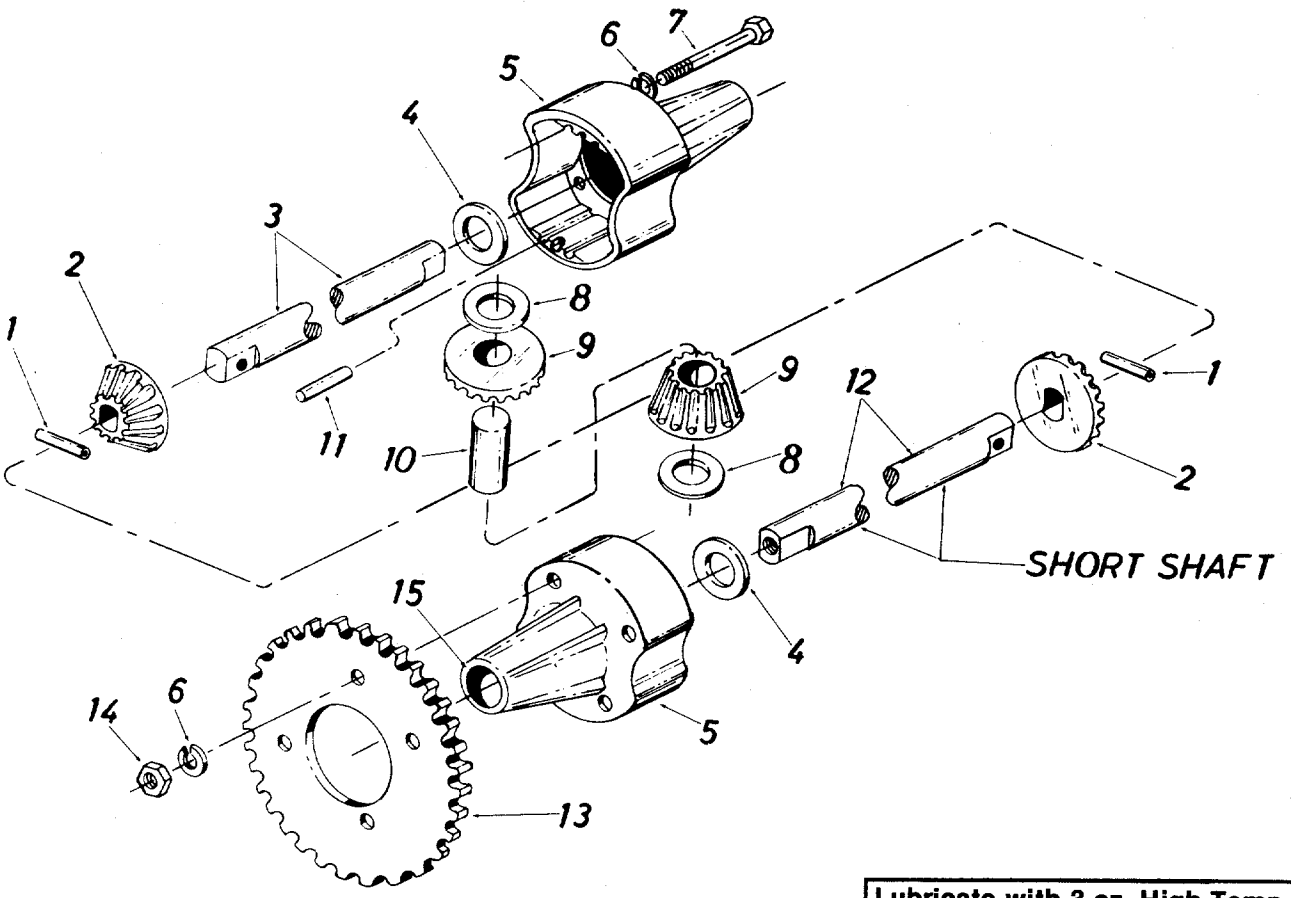


PARTS LIST FOR TRANSMISSION MODEL 717-0806

REF. NO.	PART NO.	Qty. Req'd.	DESCRIPTION
1	FF-1101	4	Bearing, Flange
2	FF-1068	*	Washer, Plain (.040
2	FF-1082	*	Washer, Plain (.030
2	FF-1358	*	Washer, Plain (.050
2	FF-1423	*	Washer, Plain (.025
2	FF-1424	*	Washer, Plain (.035
2	FF-1425	*	Washer, Plain (.045
2	FF-1441	*	Washer, Plain (.020
3	FF-3395	1	Ring, Retaining
4	FF-3422	1	Spacer
5	FF-2770	1	Assembly, Gear, Kit, 30T
6	FF-1083	2	Collar, Clutch
7	FF-2772	1	Assembly, Gear, Kit, 25T
8	FF-3423	1	Spacer
9	FF-1099	1	Ring, Retaining
10	FF-1085	1	Gear, Bevel, 42T
11	FF-3460	1	Gear, Spur, 20T
12	FF-1087	1	Sprocket, Special, 12T
13	FF-3443	1	Shaft, Drive
14	FF-3068	2	Key, Hi-Pro, Special
15	FF-1374	1	Key, Wdrf., #9
16	FF-1090	1	Chain
17	FF-1106	1	Ring, Retaining
18	FF-3149	1	Gear, Spur, 20T
19	FF-1095	2	Spring, Compression
20	FF-2771	1	Assembly, Gear, Kit, 25T
21	FF-3409	1	Spacer
22	FF-3153	1	Gear, Spur, 30T
23	FF-1104	1	Sprocket, 12T
24	FF-1375	2	Key, #16 Wdrf., Alloy
25	FF-1369	2	Key, #3 Wdrf., Alloy
26	FF-1094	1	Shaft, Output
27	FF-1371	1	Key, #4 Wdrf., Alloy
28	FF-1089	1	Sprocket, 7T
29	FF-1300	1	Ring, Retaining
30	FF-1064-A	1	Housing, Lower
31	FF-1100	1	Ring, Retaining
32	FF-1105	1	Pinion, Bevel, 16T
33	FF-1370	1	Key, Wdrf., #4
34	FF-1926	1	O-Ring
35	FF-1099	1	Ring, Retaining
36	FF-1073	4	Screw, Shoulder
37	FF-1074	1	Plate, Lock-Out
38	FF-1070	1	Fork, Shifter, L.H.
39	FF-1657	1	Fork, Shifter, R.H.
40	FF-1065-J	1	Housing, Upper
41	FF-1360	8	Bolt, Hx. Hd. S.T., ¼-20 x 1-5/16
42	FF-1096	1	Washer, Wave
43	FF-1037	2	Ball, Detent
44	FF-1475	2	Spring, Detent
45	FF-1091	1	Insert, Nylon
46	FF-1670	1	Cover, Nylon
47	FF-3405	4	Screw, Tapping, #10-24 x ½
48	FF-2683	1	Assembly, Lever, Shift
49	FF-1318	1	Knob, Shift
50	FF-2571	1	Assembly, Kit, Input Shaft

*Indicates usage in various combinations to maintain proper clearances.
**Complete kit is required for proper service replacement.

Models 395, 397 and 398



Lubricate with 3 oz. High Temp. Grease Sunaplex 990 EP. Order Part No. 737-0120.

PARTS LIST FOR DIFFERENTIAL ASSEMBLY 717-0318

REF. NO.	PART NO.	Qty. Req'd.	DESCRIPTION	NEW PART
1	715-0247	2	Spring Pin Spiral 3/16" Dia. x 1.00" Lg.	
2	748-0156	2	Gear—Double "D" Hole	
3	738-0302	1	Shaft (Long)—15.11" Lg.	
4	736-0188	2	Fl-Wash. .760 I.D. x 1.49 O.D.	
5	719-0150	2	Housing Half	
6	736-0119	8	L-Wash. 5/16" I.D.*	
7	710-0363	4	Hex Bolt 5/16-24 x 4.00" Lg.	
8	736-0187	2	Fl-Wash. .640 I.D. x .24 O.D.	
9	748-0158	2	Gear—Round Hole	
10	711-0276	1	Drive Pin	
11	715-0145	2	Dowel Pin 3/16" Dia. x .62" Lg.	
12	738-0303	1	Shaft (Short)—7.58" Lg.	
13	09054	1	Sprocket—40 Teeth	
14	712-0237	4	Hex Cent. L-Nut 5/16-24 Thd.	
15	748-0169	2	Flange Bearing	

*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

PARTS INFORMATION

POWER EQUIPMENT PARTS AND SERVICE

Parts and service are available through the authorized service firms listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part required.

BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and s should be handled by your nearest authorized engine service . Check the yellow pages of your telephone directory under the listing **Engines—Gasoline,** Briggs & Stratton or Tecumseh Lauson.

NOTE: If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

ALABAMA	**BIRMINGHAM**	
Auto Electric & Carburetor Co.	2625 4th Ave. S.	35233
ARKANSAS	**NORTH LITTLE ROCK**	
Sutton's Lawn Mower Shop	5301 Roundtop Drive Box 368, Rt. 4	72117
CALIFORNIA	**PORTERVILLE**	
Billious	75 North D Street	93257
COLORADO	**DENVER**	
Spitzer Industrial Products Co.	6601 N. Washington St.	80229
FLORIDA	**JACKSONVILLE**	
Radco Distributors	4909 Victor St. Box 5459	32207
	HIALEAH	
Small Eng. Dist.	7995 W. 26th Court	33016
GEORGIA	**EAST POINT**	
East Point Cycle & Key Inc.	2834 Church St.	30344
ILLINOIS	**LYONS**	
Keen Edge Co.	8615 Ogden Ave.	60534
INDIANA	**ELKHART**	
Parts & Sales Inc.	2101 Industrial Pkwy.	46516
IOWA	**DUBUQUE**	
Power Lawn & Garden Equip.	2551 J.F. Kennedy	52001
LOUISIANA	**NEW ORLEANS**	
Suhren Engine Co.	8330 Earhart Blvd.	70118
MARYLAND	**TAKOMA PARK**	
Center Supply Co.	6867 New Hampshire Ave.	20912
MASSACHUSETTS	**SPRINGFIELD**	
Morton B. Collins Co.	300 Birnie Ave.	01107
MICHIGAN	**LANSING**	
Lorenz Service Co.	2500 S. Pennsylvan a	48910
	MOUNT CLEMENS	
Power Equipment Dist.	340 Hubbard	48043
MINNESOTA	**HOPKINS**	
Hance Distributing Inc.	420 Excelsior Ave. W.	55343
MISSOURI	**KANSAS CITY**	
Automotive Equip. Service	3117 Holmes St.	64109
	ST. JOSEPH	
Ross-Frazer Supply Co.	8th and Monterey	64503
	ST. LOUIS	
Henzler, Inc.	2015 Lemay Ferry Rd.	63125
NEW JERSEY	**BELLMAWR**	
Lawnmower Parts Inc.	717 Creek Rd.	08030
NEW MEXICO	**ALBUQUERQUE**	
Spitzer Eng. & Parts Co.	1023 Third Ave. N.W.	87103
NEW YORK	**CARTHAGE**	
Gamble Dist., Inc.	West End Ave.	13619
OHIO	**CARROLL**	
Stebe's Mid-State Mower Supply	Box 366, 71 High St.	43112
	CLEVELAND	
Bleckrie, Inc.	7900 Lorain Ave.	44102
	WADSWORTH	
National Central	687 Seville Rd.	44281
	YOUNGSTOWN	
Burton Supply Co.	1301 Logan Ave. Box 929	44501
OKLAHOMA	**MUSKOGEE**	
Victory Motors, Inc.	605 S. Cherokee	74401
OREGON	**PORTLAND**	
Kenton Supply Co.	8216 N. Denver Ave.	97217
PENNSYLVANIA	**HARRISBURG**	
EECO Inc.	4021 N. 6th St.	17110
	PHILADELPHIA	
Thompson Rubber Co.	5222-24 N. Fifth St.	19120
	PITTSBURGH	
Bluemont Co.	11125 Frankstown Rd.	15235
	PUNXSUTAWNEY	
Frank Roberts & Sons	R.D. 2	15767
	SCRANTON	
Scranton Auto Ignition Co.	1133-35 Wyoming Ave.	18509
TENNESSEE	**KNOXVILLE**	
Master Repair Service	2000 Western Ave.	37921
	MEMPHIS	
American Sales & Service, Inc.	3035-43 Bellbrook	38
TEXAS	**DALLAS**	
Marr Brothers, Inc.	423 E. Jefferson	7
	FORT WORTH	
Woodson Sales Corp.	6733 Baker Blvd. Hwy. 10	76118
	HOUSTON	
Bullard Supply Co.	2409 Commerce St.	77003
	SAN ANTONIO	
Engine House Inc.	8610 Botts Lane P.O. Box 17867	78217
UTAH	**BOUNTIFUL**	
Powered Products	485 N 500 W.	84010
VIRGINIA	**ASHLAND**	
RBI Corp.	101 Cedar Ridge Dr.	23005
WASHINGTON	**SEATTLE**	
Equip. Northwest	1410 14th Ave.	98122
NORTH CAROLINA	**GOLDSBORO**	
Smith Hardware Co.	515 N. George St.	27530
	GREENSBORO	
Dixie Sales Company	335 N. Green	27402

WARRANTY PARTS AND SERVICE POLICY (0484)

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has no control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

1. **Replacement of Missing Parts** on new equipment.
2. **Replacement of Defective Parts** within the warranty period.
3. **Repair of Defects** within the warranty period.

All claims MUST be substantiated with the following information:

1. **Model Number** of unit involved.
2. **Date** unit was purchased or first put into service.
3. **Date of failure.**
4. **Nature of failure.**

MTD PRODUCTS INC • P.O. BOX 36900 • CLEVELAND, OHIO 44136